

In the Claims

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1. (Twice Amended) A fusion molecule consisting of (a) a peptide consisting of amino acids 12 to 88 of the hepatitis delta antigen (HDAg) or a fragment thereof that forms a coil and (b) at least one binding moiety.
 58. (Amended) The fusion molecule of Claim 1 wherein the binding moiety is selected from the group consisting of cytokines, tumor necrosis factor, interferons, interleukins, adenosine deaminase, insulin, T-cell receptors, soluble CD4, epidermal growth factor, human growth factor, cytochrome b, glucocerebrosidase, ApoE, ApoC, ApoAI, the LDL receptor, Fc receptors, plasminogen activators, dopamine, MHC, tumor suppressor genes, monoclonal antibodies, antigen binding fragments of monoclonal antibodies, drug resistance genes and ion channels.

Amendments to the claims are indicated in the attached "Marked Up Version of Amendments" (page i).

REMARKSClaim Amendments

Claims 1 and 58 have been amended to expedite prosecution of the application. Claim 1 has been amended to delete the term "essentially". Support for this amendment is found throughout the Specification, for example, in originally-filed Claim 1 and amino acids 12-88 of originally-filed Figure 10. Claim 58 has been amended to delete the terms "blood factors", "negative selection factors" and "anti-angiogenic factors". Support for this amendment is found in the Specification on page 37, lines 6-16.

No new matter is added by these amendments.

Election/Restriction

In response to the Restriction Requirement made final, applicants are concurrently filing a Petition Under 37 C.F.R. 1.144 as suggested by the Examiner.

Rejection of Claims 1-2, 4-6 and 58 under 35 U.S.C. § 102 (b)

The rejection of Claims 1-2, 4-6 and 58 under 35 U.S.C. § 102(b) as being anticipated by Chang *et al.* (Journal of Virology, Vol. 66, No. 10, Oct. 1992, pages 6019-6027) and by Lee et al. (Virology, Vol. 169, Feb 1994, pages 169-175) and by Bonelli et al. (EP Patent No. 0485347) is maintained.

According to the Examiner, since it is unclear how the “consisting essentially of” language is being applied to an amino acid sequence, said term is being interpreted in the same manner as “comprising”, and, therefore, the instant invention is still anticipated by each of the cited references, which each teach fusion proteins of the full length HDAg.

In spite of the fact that the term “consisting essentially of” has a long accepted and recognized meaning in the patent law, to expedite prosecution of the application and to bring the case to allowance, Claim 1 is amended to delete the term “essentially”. The claim now recites “a...peptide consisting of amino acids 12 to 88 of the hepatitis delta antigen (HDAg) or a fragment thereof that forms a coil ...” None of the cited references teach a fusion molecule where a binding moiety is linked to a peptide consisting of amino acids 12 to 88 of the hepatitis delta antigen (HDAg) or a fragment thereof that forms a coil. Accordingly, particularly as amended, Claim 1 is not anticipated by any of the cited references. Claims 2, 4-6 and 58 are dependent upon Claim 1, and, therefore, have the same limitations as Claim 1. Therefore, they are also not anticipated by the cited references.

Reconsideration and withdrawal of the rejections is respectfully requested.

Rejection of Claims 1-2, 4-6 and 58 under 35 U.S.C. § 112, Second Paragraph

Claims 1-2, 4-6 and 58 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

According to the Examiner, Claim 1 is rendered vague and indefinite by the use of the phrase “consisting essentially of amino acids 12-88...” on the grounds that it is unclear how the “consisting essentially of” language is being applied to an amino acid sequence, and, therefore, the metes and bounds of the claimed invention cannot be determined while the rejection is clearly inappropriate in view of the long accepted use of the phrase, “essentially” has been deleted from the Claim 1 merely to expedite prosecution. Accordingly, the rejection is moot. Since Claims 2, 4-6 and 58 are dependent upon Claim 1, the rejection of these claims on this ground is also moot.

According to the Examiner, Claim 58 is rendered vague and indefinite by the use of the term "blood factors". According to the Examiner, it is unclear what is meant by the term, and, as written, it is impossible to determine the metes and bounds of the claimed invention. To expedite prosecution, the term "blood factors" has been deleted from Claim 58. Accordingly, the rejection is moot.

According to the Examiner, Claim 58 is also rendered vague and indefinite by the use of the term "negative selection factors". According to the Examiner, it is unclear what is meant by the term, and, as written, it is impossible to determine the metes and bounds of the claimed invention. To expedite prosecution, the term "negative selection factors" has been deleted from Claim 58. Accordingly, the rejection is moot.

According to the Examiner, Claim 58 is rendered vague and indefinite by the use of the term "anti-angiogenic factors". According to the Examiner, it is unclear what is meant by the term, and, as written, it is impossible to determine the metes and bounds of the claimed invention. To expedite prosecution, the term "anti-angiogenic factors" has been deleted from Claim 58. Accordingly, the rejection is moot.

CONCLUSION

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,

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MARKED UP VERSION OF AMENDMENTS

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Claim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

1. (Twice Amended) A fusion molecule [comprising] consisting of (a) a peptide consisting [essentially] of amino acids 12 to 88 of the hepatitis delta antigen (HDAg) or a fragment thereof that forms a coil and (b) at least one binding moiety.
58. (Amended) The fusion molecule of Claim 1 wherein the binding moiety is selected from the group consisting of cytokines, tumor necrosis factor, interferons, interleukins, adenosine deaminase, insulin, T-cell receptors, soluble CD4, epidermal growth factor, human growth factor, [blood factors,] cytochrome b, glucocerebrosidase, ApoE, ApoC, ApoAI, the LDL receptor, [negative selection markers, anti-angiogenic factors,] Fc receptors, plasminogen activators, dopamine, MHC, tumor suppressor genes, monoclonal antibodies, antigen binding fragments of monoclonal antibodies, drug resistance genes[,]
and ion channels[, and adrenergic receptors].